



STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
File:

**NEUROTRAUMA ADVISORY BOARD (NTAB)
MEETING MINUTES
April 24, 2014**

Present: Lyna Burian, Angie Enoka, Elzy Kaina, Scott Sagum, Karen Seth, Milton Takara,

Excused: Sally Jones, Ian Mattoch, Stella Wong

Others: Kevin Furutani, Hawaii Neurotrauma Registry (HNTR); Anastassia Hale, Center for Neuro-Skills; Violet Horvath, Pacific Basin Rehabilitation Research and Training Center, (PBRRTC); Rita Manriquez, STBIAB Member; Nathan Murata, University of Hawaii Manoa; Ross Oshiro, Department of Education (DOE); Valerie Yamada, HNTR, Hui Malama Po'o

DOH Staff: Curtis Inouye

- I. Call to Order – Meeting was called to order by Ms. Karen Seth, Chair, at 1:55 p.m. Quorum present.
- II. Approval of Minutes – Minutes to the February 27, 2014 NTAB Meeting approved with the following amendment: Under Section V., Old Business: B. PBRRTC-HNTR Update, first paragraph, first sentence amended to read “Violet Horvath, Interim Director provided an update on the Hawaii Neurotrauma registry”. Board Member Elzy Kaina made a motion to approve the Minutes with amendment. Motion was second by Board Member Scott Sagum. Motion carried to approve Minutes of the February 27, 2014 NTAB Meeting with amendment.
- III. Review of Agenda – Ms. Seth reviewed the Board’s agenda. No changes made to the agenda, approved as submitted.
- IV. New Business
 - A. Neurotrauma Advisory Board Membership: Both the House and Senate Conference Committees recommends that HB2304 HD2 SD2 which reduces Neurotrauma Advisory Membership from twenty-one to eleven members while maintain representation of all existing parties be passed with amendments. The Bill will now be sent to the Governor’s Office. DOH will begin the process to complete NTAB Membership according to outcome of HB2304 HD2 SD2 after receiving the Governor’s response to the Bill.

V. Old Business

A. Pacific Basin Rehabilitation Research Training Center-Hawaii Neurotrauma Registry Update:

Violet Horvath, Director PBRRTC-HNTR provided an updated report on the HNTR through March 31, 2014. Violet informed Board Members that the format of the report has been modified to reflect what has occurred over the past couple of months covering the various activities of the contract. Violet reported that there are currently 41 participants in the HNTR as of 3/31/14. In the area of public education, the HNTR has been to a total of 22 events. A total of 2037 individuals have visited the HNTR table with 1450 HNTR brochures distributed. Violet also mentioned that there were 7 presentations about the registry to professionals, primarily at hospitals and clinics. There were a total of 93 professionals who attended these presentations. HNTR staff will be meeting to discuss social media and how to get the word out on the HNTR. Per Violet, an article on the HNTR was published in the February/March 2014 issue of Generations Magazine (see attached report for more information). Eight volunteer training sessions have been held with a total of 42 volunteers attending these sessions (duplicated counts included). Violet also mentioned that the HNTR project will soon have additional part-time assistance. For additional information on the HNTR Advisory Board, Intake survey, Brochure, community events and presentations, please refer to Violet's report which is attached.

B. Hawaii Concussion Awareness Management Program Update:

Ross Oshiro from the Department Of Education provided a summary of concussions reported from high schools statewide covering the period up to March, 2014. There were 6953 baselines conducted with 1174 concussions reported up to 3/31/14. By sports, football continues to be the sport with the most reported concussions with 371 reported concussions and with spring football expected to start in the next few weeks, Ross expects the numbers to increase in reported concussions. The sport with the second most reported concussions is girls soccer with 115 reported concussions followed by girls basketball with 83 reported concussions. Ross mentioned that girls soccer has more reported concussions than boys soccer possibly due to the style of play and the development in neck and core strength. A question was asked by Board Member Karen Seth regarding some information on the percentage of concussions to baseline and if this information could be presented in the report. Ross mentioned that although baselines are mentioned in the report, it is not an indication of all baselines that are done. Ross also mentioned that the baseline process will be reviewed. For additional information on concussions by sports, concussions by islands, and by participating high schools statewide, see Ross' report which is attached to the Minutes.

Dr. Nathan Murata reported that they have been very busy the past couple months and will be busy in the coming months regarding presentations on education and awareness piece of the contract. They have been on the neighbor islands and were recently on the island of Maui where they addressed soccer coaches. While at the presentation on Maui, Nathan and Ross also met a student athlete who suffered a concussion during a sporting event and he was able to talk to the participants on his injury. Refer to the Concussion Report for School Year 2013-2014 for

additional information on the education and awareness community activities mentioned by Dr. Murata.

C. Hawaiian Islands regional Stroke Network Update:

Karen Seth reported on the Hawaiian Islands Regional Stroke Network Update. She mentioned that Queen's Medical Center (QMC) is the Hub Site and the current spoke sites are Molokai General Hospital, Wahiawa General Hospital, and Hilo Medical Center. Per Karen, there were a total of 43 Telestroke calls completed. 21 of these individuals received tissue plasminogen activator (tPA) which is a clot dissolving drug at the spoke site and 15 were subsequently transferred to QMC. See Karen's report which is attached for additional information on the Spoke Site outcomes. Karen also mentioned that QMC, as part of their community education event, a presentation by Dr. Rony Salem on Stroke-Signs and Symptoms, Treatment, and Risk Factors on May 28, 2014. Per Karen, QMC in partnership with The American Heart/American Stroke Association and the DOH have designed a bus placard which will be in all City buses for the month of May, which is Stroke Awareness Month. As for potential Spoke Sites, Karen reported that Queen's West will open on May 20, 2014 and will utilize the telestroke camera in the Emergency Room. Kona Community Hospital will launch this summer, 2014.

D. Neighbor Island TBI Activities:

Kauai: Board Member Scott Sagum reported that his organization continues to provide education and awareness on Surfer's Myelopathy. They have done presentations to surf schools on Kauai and recently had a presentation done at one of their schools with good response. Keep up the good work.

E. Educational Initiatives Sub-committee: The DOH is seeking NTAB Members who are interested in joining the sub-committee. The sub-committee will discuss and prioritize the educational initiatives associated with neurotrauma injuries and the format in which it will be presented (conference/summer institute/etc.). State Traumatic Brain Injury Advisory Board (STBIAB) Members will also be involved in the sub-committee. NTAB Members Scott Sagum, Angie Enoka and Lyna Burian have volunteered along with Violet Horvath from PBRRTC. DOH staff to coordinate sub-committee meeting along with Board members from the STBIAB.

F. DOH Update:

i. NT Special Fund Balance: Cash balance as of 4/17/14 is approximately \$427,095.00. Projected contract encumbrance for fiscal year 2014 \$250,000 for PBRRTC-HNTR. The total Projected P.O. claims for fiscal year 2014 is \$92,000.

ii. STBIAB Update: The STBIAB is in the process of updating the TBI Binder. There is a STBIAB sub-committee that is also developing a TBI brochure. The content of the brochure is nearly completed and once done, the formatting of the brochure will be addressed. Once completed, the draft brochure will be brought to the NTAB for review.

VI. Announcements

- A. Board Member Karen Seth announced that this will be her last Board Meeting. She will be moving in June, 2014 to the San Francisco Bay area. The DOH and Board Members from both the NTAB as well as the STBIAB want to thank Karen for her dedication and commitment as Chair of the NTAB. We thank her for a job well done and wish her the best in San Francisco.
- B. Brain Injury Association of Hawaii:

Support Group Meetings for May, 2014:

May 3, 2014 from 1:00 to 3:00 p.m. and May 21, 2014 from 6:00 to 7:30 p.m. Both Meetings will be held at the Rehabilitation Hospital of the Pacific in Wo Conference Room #4.

Educational Meetings for May 2014:

May 14, 2014 from 6:00 to 8:00 p.m. The meeting will be held at the Rehabilitation Hospital of the Pacific in Wo Conference Room #4.

Support Group Meetings for June, 2014: NOTE CHANGES

June 7, 2014 from 1:00 to 3:00 p.m. and June 18, 2014 from 6:00 to 7:30 p.m. Both Meetings will be held at the Brain Injury Resource Center at 200 North Vineyard Blvd. Please call Mary Wilson or Lyna Burian for additional information on the support group meetings and directions. You can contact Lyna at 521-7721 or Mary at 375-7565.

Educational Meetings for June 2014:

June 11, 2014 from 6:00 to 8:00 p.m. The meeting will be held at the Brain Injury Resource Center at 200 North Vineyard Blvd. Please call Mary Wilson or Lyna Burian for additional information on the support group meetings and directions. You can contact Lyna at 521-7721 or Mary at 375-7565.

VII. Next Meeting

Date: June 26, 2014

Time: 1:30-4:00 pm

Place: Kalanimoku & Neighbor Island VCCs

Adjourned:

Recorded by Curtis Inouye

Hawaiian Islands Regional Stroke Network Update

(Funded by a grant from the Hawaii State Dept. of Health Neurotrauma Fund)

Hub site: The Queen's Medical Center

Current spoke sites:

Molokai General Hospital, Wahiawa General Hospital and Hilo Medical Center are active. Three spoke site hospitals – ED MDs and nurses, hospitalists, and administration - have been educated on stroke care paths and protocols and in-serviced on use of the technology.

- Number of Telehealth sessions:
43 Telestroke calls completed:
 - 9 from Molokai General Hospital (activated on 11/8/2011)
 - 25 from Wahiawa General Hospital (activated on 6/21/2012)
 - 9 from Hilo Medical Center (activated on 8/1/13)
- 8 calls not completed – could not connect or complete due to technical reasons.
- Outcomes of calls: 21 of 42 patients transferred to QMC

21 patients received tPA at spoke site and 15 subsequently transferred to QMC.

Pt. 1: Initial NIHSS of 9 and discharge NIHSS of 2. D/C to home.

Pt. 2: Initial NIHSS of 6 and discharge NIHSS of 1. D/C to home.

Pt. 3: Initial NIHSS of 16 and discharge NIHSS of 16. D/C to hospice with left lung small cell carcinoma and metastases to the brain.

Pt. 4: Initial NIHSS of 5 and discharge NIHSS of 1. D/C to home.

Pt. 5: Initial NIHSS of 14 NIHSS of 0. D/C to home
(Question of malingering or conversion disorder).

Pt. 6: Initial NIHSS of 13 which did not improve. D/C to nursing home.

Pt. 7: Initial NIHSS of 6. NIHSS of 2 upon arrival to QMC (5/28/13)
DC to home.

Pt. 8: Initial NIHSS of 5 decreased to 0 on transfer. DC to home.

Pt. 9: Initial NIHSS of 8. DC to RHOP-hemorrhagic conversion

Pt. 10: Initial NIHSS of 3 and remained with NIHSS of 3 on
6/11/13. DC to home.

Pt. 11: Initial NIHSS of 11. DC to RHOP and last NIHSS was 13.

Pt. 12: Initial NIHSS of 13. Pt not transferred to QMC. DC to
home after 3 days in rehab at HMC. Final NIHSS was 0.

Pt 13: Initial NIHSS of 11. Patient with improved movement but
remained aphasic after transfer to QMC. DC to RHOP with final
NIHSS of 6.

Pt 14: Initial NIHSS of 7 at time of Telestroke and 15 on arrival at
QMC. DC to RHOP

Pt 15: Initial NIHSS of 7. Complete resolution of stroke symptoms
after IV tPA administration with NIHSS score of 0 on arrival to
QMC. DC to home.

Pt 16: Initial NIHSS of 6 and remained at HMC. Transferred to
Kaiser on day of service with an NIHSS of 4

Pt 17: Initial NIHSS of 7 and remained at HMC. DC to SNF
ambulating w/ assist and feeding herself (No NIHSS documented).

Pt 18: Initial NIHSS of 16. Remained at WGH due to lack of
available bed at QMC. NIHSS decreased to 0 under supervision of
Telestroke MD.

Pt 19: Initial NIHSS of 17 and remained at HMC. DC to home with
minimal left sided weakness.

Pt 20: Initial NIHSS of 21 and remained at HMC. NIHS remained
21 the next day.

Pt 21: Initial NIHSS of 10 at Molokai and improved to 3 on arrival at
QMC. Remains hospitalized at the time of this report.

- 5 patients did not receive tPA but transferred to QMC for closer monitoring and further evaluation.
- 1 patient transferred to QMC but final diagnosis of seizure
- 15 patients remained at spoke site since they were not tPA candidates and did not require a higher level of care. These patients were found to be either mild stroke, complex migraine, old stroke, ICH or with transient symptoms.
- 5 patients at HMC who received t-PA remained at site.
- Telemedicine encounters require 40- 45 minutes of direct critical care time

2014 Community Education

- Na Puuwai program, Molokai, HI – Jan. 23, 2104 – Kazuma Nakagawa, MD, "Stroke Prevention.
- First Insurance Company – Feb. 27, 2014 – Denise Dittrich, "Stroke What you should know."
- QMC Speaking of Health – May 28, 2014 – Rony Salem, MD, "Stroke Signs and Symptoms, Treatment and Risk Factors.
- AHA/ASA TheBus Placards for May Stroke Awareness Month

2014 Professional Education

- Hilo Medical Center – March 7, 2014 – Matt Koenig, MD, "Telestroke"
- QMC Grand Rounds – May 16, 2014 – Rony Salem, MD, " Stroke Treatment 2014 update"

Potential Spoke Sites

- Queen's West – will open in May 20, 2014 and will utilize the telestroke camera.
- Kona Community Hospital – will launch this summer 2014.



**Hawai'i Neurotrauma Registry Project (HNTR) Report
for Neurotrauma Advisory Board (NTAB)
April 24, 2014, 1:30 – 4:30 p.m.**

Hawai'i Neurotrauma Registry update through March 31, 2014

Item	Total through January 2014	February 2014	March 2014	Grand Total
Registry Participation				
Number of unique participants in HNTR Registry	31	6	4	41
Public Education				
Public events attended by HNTR staff and volunteers	16	0	6	22
Number of individuals who visited HNTR tables at public events	1610	0	427	2037
Number of HNTR brochures distributed	877	107	466	1450
Number of HNTR business cards distributed	66	27	98	191
Neurotrauma educational materials distributed	253	0	194	447
Number of volunteers assisting with public events	25	0	2	27
Networking with Professionals				
Presentations about HNTR to professionals	2	1	4	7
Number of professionals who attended HNTR presentations	30	8	55	93
Networking contacts made with partners / collaborators	27	1	15	43
Events / presentations in conjunction with partners / collaborators	1	1	2	4
Media				
Print articles	0	1	0	1
Print ads	0	0	0	0
HNTR newsletters (quarterly, beginning April 2014)	0	0	0	0
Distribution (Number of subscribers)	0	0	0	0
TV or Radio PSAs	0	0	0	0
TV programs, appearances, or ads	0	0	0	0
Social media following	0	0	0	0
Facebook Posts	0	0	0	0
Facebook Friends/Following	0	0	0	0
Twitter Posts	0	0	0	0
Twitter Following	0	0	0	0

Information and Referral				
Number of information / referral contacts with individuals	58	10	10	78
Number of information / referrals provided to individuals Range: 1 – 5 pieces of information / referrals per contact Average: 1.86 pieces of information / referrals per contact	109	20	16	145
Volunteers/Trainings				
Number of volunteer trainings held	6	1	1	8
Number of volunteers attending trainings (duplicated count)	30	6	6	42
Number of new volunteers recruited to help with HNTR	9	0	0	9

Overall

- Modification to contract: Fully executed modification extending end date to March 20, 2015, was just received.
- Staff members will be meeting in the next month or two to develop a plan and timeline through the end of the current contract year (March 21, 2015).

Personnel

- The project will soon have additional part-time assistance:
 - Student who will be working approximately April – August
 - Social work practicum student who will be working approximately May – August
 - Possibly a registered nurse who will be working approximately May - August

Advisory Board

- At a meeting scheduled in April, HNTR staff will produce a list of possible board members. The list will include state officials, agency/organization representation, and community members, on Oahu and Neighbor Islands. Goal is to have first board meeting in May or June.

Revision of Intake Survey

- Staff members have received preliminary approval of suggested revisions to survey. The revisions will be made in the next few weeks and the revised copy will be approved by DOH before it is submitted to the University of Hawai'i Human Subjects Committee for review.

Revision of HNTR Brochure

- The brochure is being revised to remove duplication of information and add information about the benefits of the Registry and the project. A tear-off mail-in referral sheet is also being added.

Outreach – Community Events and Presentations

<i>Date</i>	<i>Event</i>	<i>Location</i>	<i># of Individual Contacts</i>
2-5-14	Hawai'i Pacific Neuroscience Institute	Castle Medical Center	8
2-27-14	National Organization of Volunteer Leaders	Haunama Bay	20
3-1-14	Papakolea Health Fair	Lincoln Elementary School	17
3-4-14	FHB PrimeTime Wellness Fair	Neal Blaisdell Exhibition Hall	200
3-4-14	Stroke Club Meeting	Rehabilitation Hospital of the Pacific	12
3-6-14	Center for Neuro Skills Mild Traumatic Brain Injury Presentation	Pacific Club	6
3-6-14	Spinal Cord Injury Meeting	Rehabilitation Hospital of the Pacific	17
3-8-14	CHIMACE Keiki Health Festival	Bishop Museum	37
3-8-14	Project Grad: White Elephant Sale	Castle High School	7
3-12-14	Brain Injury Association of Hawai'i Traumatic Brain Injury Panel Presentation	Rehabilitation Hospital of the Pacific	17
3-18-14	Hawai'i Division of Vocational Rehabilitation (DVR)	DVR Offices, 600 Kapiolani	9
3-19-14	4 th Annual Veterans Conference	University of Hawai'i at Manoa Campus Center	6
3-20-14	Boys & Girls Club of Hawai'i, Ewa	Ewa Beach, Hale Pono	47
3-21-14	Kamehameha Middle School Health Fair	Kapalama Campus	118

Upcoming Events and Presentations (subject to change)

- 28th Annual Special Parents Information Network Conference at UH Manoa (April)
- Palolo Chinese Home (April)
- Green Fair, Mililani Recreation Center (April)
- Teddy Bear Drive (April)
- UH Manoa Volunteer Fair (April)

- Mother's Day Craft Fair, Mililani Recreation Center (May)
- MADD Dash/Walk Like MADD, Kaka'ako Waterfront Park (May)
- New Baby Expo (May)
- Maui PrimeTime Wellness Fair (July – tentative)
- Hawai'i Official Motorcycle Rally & Bike Show (August)
- Get Ready Ewa Beach (September)
- Kauai PrimeTime Wellness Fair (September – tentative)
- Oh Baby! Family Expo (October)
- Long-Term Health Care Conference (October)
- Big Island (Hilo) PrimeTime Wellness Fair (October – tentative)
- Boys & Girls Club of Hawai'i, Nanakuli and Waianae (tentative)
- Get Fit Fair (January 2015)

Volunteer Trainings

- "How to Promote HNTR" piloted on February 28, 2014.
 - Feedback from training has resulted in the development of a cheat sheet for volunteers on "Who, What, When, Where, Why"
- "How to Promote the Registry, Part II" scheduled for April 12, 2014.

Information and Referrals

- February: 10 individuals received 16 pieces of information/referrals; one group received information on hyperbaric treatment.
- March: 10 individuals received 13 pieces of information/referrals.

PSAs and Social Media Campaign

- Article on HNTR was published in the February/March 2014 issue of *Generations* magazine, in hardcopy and online at <http://www.generations808.com/fm2014a.html>
- Looking into purchasing an ad in *Hawai'i Health Magazine*, which also has a resource listing that continues to refer interested persons to Ho'oikaika (from an old advertisement purchased by PBRRTC), then to HNTR.
- Quarterly electronic HNTR newsletter scheduled to begin in April 2014.

Concussion Report for School Year 2013 - 2014

Report Summary from 8/1/13 to 3/31/14

67 Schools	Total	BIIF	KIF	MIL	ILH	OIA
Number of Baselines	6953	1086	370	322	2028	3133
Number of Concussions	1174	116	43	116	274	625

Presentations:

1. August 10, Keiki Day at Kahala Mall
2. August 31, Island Football League at Wahiwa District Park
3. September 7th, Big Boys Football at Kuhio Park Terrce
4. Dept. of Park & Recreation, Waimanalo District Park
5. October 2nd, Hilo Pop Warner
6. October 6th, Children & Youth Day @ State Capital
7. October 27th, Hawaii Pacific Health, Kids Fest @ Bishop Museum
8. February 27th, Maui. 60 participates
9. March 16th, McKinley HS, Zumbia with Hawaii Athletic Trainers Association
10. March 24, Anuenue, Canoe Paddling Association
11. April 5th, SPIN Parent Conference - UH Manoa
12. April 8th, Kona. Athletic Directors Meeting
13. May 8, Hilo TBD
14. May 10th, Hawaii Association for Health, Physical Education, Recreation and Dance
15. May 19, Pac Rim Presentation
16. June 8, Kauai TBD
17. June 9-12th SWD AMerican Alliance for Health, Physical Education, Recreation and Dance
18. August 1, Western Orthopedic Association, Kona

SPORTS	Number of Baseline	Number of Concussion		
	8/1/13 to 3/31/14	8/1/13 to 2/28/14	3/1/14 to 3/31/14	Total to date
Baseball (M)	477	20	7	27
Baseball (F)	5	0	0	0
Basketball (M)	470	58	0	58
Basketball (F)	378	83	0	83
Boating Related (M)	26	0	0	0
Boating Related (F)	24	2	0	2
Cheerleading (M)	15	0	0	0
Cheerleading (F)	296	73	0	73
Football (M)	1175	370	1	371
Football (F)	4	2	0	2
Golf (M)	10	0	0	0
Golf (F)	6	0	0	0
Lacrosse (M)	1	0	0	0
Lacrosse (F)	2	0	0	0
Martial Arts (M)	137	4	13	17
Martial Arts (F)	100	7	13	20
Soccer (M)	474	51	0	51
Soccer (F)	648	111	4	115
Softball	375	36	16	52
Swimming (M)	23	0	0	0
Swimming (F)	35	3	0	3
Tennis (M)	52	2	0	2
Tennis (F)	72	3	0	3
Track & Field (M)	55	3	4	7
Track & Field (F)	53	6	4	10
Volleyball (M)	212	0	3	3
Volleyball (F)	751	48	2	50
Wate Polo (M)	110	1	0	1
WaterPolo (F)	170	3	2	5
Wrestling (M)	308	69	3	72
Wrestling (F)	158	27	2	29
X-Country (M)	73	3	0	3
X-Country (F)	51	1	0	1
Others (M)	93	58	10	68
Others (F)	114	38	8	46
Total	6953	1082	92	1174

BIIF	Number of Baselines 8/1/13 to 3/31/14	Number of Concussion		
		8/1/13 to 2/28/14	3/1/14 to 3/31/14	Total to date
School				
Hilo High School	125	24	2	26
Honokaa High School	157	7	0	7
Kamehameha Schools-Hawaii	397	3	0	3
Kau High School	26	3	0	3
Kea'au High School	48	11	2	13
Kealakehe High School	122	18	2	20
Kohala High School	0	1	0	1
Konawaena High School	124	17	2	19
Pahoa High School	50	3	0	3
Waiakea High School	37	20	1	21
Total (10 Schools)	1086	107	9	116

KIF	Number of Baselines 8/1/13 to 3/31/14	Number of Concussion		
		8/1/13 to 2/28/14	3/1/14 to 3/31/14	Total to date
School				
Kapaa High Shchool	142	16	0	16
Kauai High School	128	12	0	12
Waimea High School	100	13	2	15
Total (3 Schools)	370	41	2	43

MIL	Number of Baselines 8/1/13 to 3/31/14	Number of Concussion		
		8/1/13 to 2/28/14	3/1/14 to 3/31/14	Total to date
School				
Baldwin High School	77	28	4	32
Hana High School	31	6	0	6
King Kekalike High School	90	20	1	21
Lahainaluna High School	31	15	3	18
Lanai High School		0	0	0
Maui High School	93	34	5	39
Molokai High School		0	0	0
Total (10 Schools)	322	103	13	116

ILH	Number of Baselines 8/1/13 to 3/31/14	Number of Concussion		
		8/1/13 to 2/28/14	3/1/14 to 3/31/14	Total to date
School				
ASSETS School	11	2	0	2
Christian Academy	14	3	0	3
Damien High School	173	29	0	29
Hanalani School	34	5	0	5
Hawaii Baptist Academy	156	23	3	26
Honolulu Waldorf School	54	0	0	0
Iolani High School	540	21	2	23
Island Pacific Academy	8	4	1	5
Kamehameha Schools-Oahu	210	25	2	27
La Pietra Hawaii School	81	5	0	5
Lanakila High School	38	0	0	0
Le Jardin Academy	112	4	0	4
Lutheran High School	23	2	0	2
Mid-Pacific Institute	253	39	3	42
Pacific Buddhist Academy	72	0	0	0
Sacred Heart Academy	45	6	1	7
St. Andrews Priori	14	2	0	2
St. Francis	132	21	1	22
St. Louis School	20	39	1	40
University Lab High	38	25	5	30
Total (21 Schools)	2028	255	19	274

OIA	Number of Baselines 8/1/13 to 3/31/14	Number of Concussion		
		8/1/13 to 2/28/14	3/1/14 to 3/31/14	Total to date
School				
Aiea High School	160	13	0	13
Anuenue School	14	11	3	14
Campbell High School	150	55	8	63
Castle High School	121	53	5	58
Farrington High School	125	21	1	22
Kahuku High School	216	14	2	16
Kailua High School	84	22	4	26
Kaimuki High School	78	11	0	11
Kaiser High School	149	15	0	15
Kalaheo High School	103	44	1	45
Kalani High School	239	21	2	23
Kapolei High School	181	12	1	13
Leilehua High School	276	63	0	63
McKinley High School	137	16	1	17
Milliani High School	197	40	8	48
Moanalua High School	135	35	1	36
Nanakuli High School	85	18	2	20
Pearl City High School	166	31	4	35
Radford High School	122	14	1	15
Roosevelt High School	132	30	5	35
Waialua High School	73	10	0	10
Waianae High School	54	10	0	10
Waipahu High School	136	17	0	17
Total (23 Schools)	3133	576	49	625